

REMARKS

In the Office Action dated September 18, 2007, the Information Disclosure Statement was stated not to comply with the provisions of 37 C.F.R. §1.97, §1.98 and MPEP §609 because the Examiner stated there is no English abstract or English translation for the references that were designated as References AL, AU and AV in the Information Disclosure Statement. The Examiner stated it has been placed in the application file, but the information therein has not been considered as to the merits.

Applicant respectfully disagrees with the statements of the Examiner, as to several issues.

First, it is clear from the "check list" that is set forth in MPEP §609.01 that if only certain references cited in an Information Disclosure Statement are believed not to comply with the requirements of 37 C.F.R. §1.97 or §1.98, the proper procedure is not to ignore the entire Information Disclosure Statement, but is to draw a line through those references that are considered to be non-compliant, on the form that is provided for initialing by the Examiner. The Examiner appears to have attempted to follow this procedure (although there does not appear to be any reason why the Examiner did not initial Reference AT on Form 1449 that was provided with the Information Disclosure Statement), but this procedure is inconsistent with the Examiner's statement that the Information Disclosure Statement has been placed in the file but the information referred to therein has not been considered as to the merits.

Applicant recognizes the Examiner may have simply included a form paragraph in the Office Action, but even if this is the case, the form paragraph should not be inconsistent with the Examiner's actual actions.

Moreover, the copies of each of References AL (DE 197 199 54) and AU (Digitale Detektorsysteme) do, in fact, have English abstracts incorporated therein.

Reference AL is the item identified as "Foreign Reference" filed June 21, 2006 that is present in the Image File Wrapper in PAIR for the present application. In the document that was originally submitted, the last two pages are an English language abstract and a representative figure. Apparently through a scanning error in the Patent Office, a blank page is interposed between those last two pages. In any event, page 7 and page 9 of that document clearly constitute an English abstract.

Additionally in PAIR, there are three documents that were filed with the original application papers that are designated in the Image File Wrapper as "NPL Documents." In the PAIR record that is available to the undersigned representative of the Applicant, when those documents are clicked on, it is indicated that the document is not electronically available. Nevertheless, Applicant assumes that one of those documents is Reference AU ("Digitale Detektorsysteme..."). In Applicant's own file copy, page 2 of that document (which is the page on which the title appears) clearly includes an English language abstract. Moreover, in order to satisfy the requirement for a "concise explanation" under 37 C.F.R. §1.98, it is not even necessary that an English language abstract be provided with or in a foreign language document. As explicitly stated in the first paragraph of Section III of MPEP §609.04(a), the "concise explanation" may be either separate from the specification or part of the specification. As explicitly stated in the Information Disclosure

Statement, Reference AU was identified and discussed at pages 1 and 5 of the Substitute Specification, and therefore even if an English language abstract had not been a part of Reference AU, the submission of Reference AU still would satisfy all requirements of 37 C.F.R. §1.98.

Lastly, as to Reference AV cited in the Information Disclosure Statement (Krause et al), that reference, as noted in the Information Disclosure Statement, was among the references cited in the International Search Report rendered during earlier PCT examination of the present application, as also were References AL and AT. In the course of examining the present national phase application, which is based on the application for which that International Search Report was rendered, the Examiner must certainly have reviewed that International Search Report. The aforementioned Section III of MPEP §609.04(a), at the end of the second paragraph, explicitly states that designations and explanations that are made in such a Search Report also satisfy the “concise explanation” requirement of 37 C.F.R. §1.98. The submission of Reference AL, therefore, was in full compliance with all provisions of 37 C.F.R. §1.98, and this also serves as a further basis for compliance of References AL and AP with the requirements of 37 C.F.R. §1.98.

In view of the above explanation, Applicant submits it was an error on the part of the Examiner not to consider all of the references in the Information Disclosure Statement. Accordingly, a new Form 1449 is submitted herewith, on which all of the references are listed, and the Examiner is requested to initial each reference to indicate consideration thereof.

Additionally, claim 5 was rejected under 35 U.S.C. §102(b) as being anticipated by Mitchel et al. Applicant notes with appreciation that claims 6-8 were

stated to be allowable if rewritten in independent form. Claim 5 has been amended as discussed below, however, and is believed to be patentable over the teachings of the Mitchel et al reference, and therefore those dependent claims have been retained in dependent form at this time.

In substantiating the rejection of claim 5 as being anticipated by Mitchel et al, the Examiner stated the background optical density of the x-ray film is assumed to be linearly related to x-ray exposure of the latent radiation image of the object from the storage radiation screen, and the Examiner apparently equated this with the claim language referring to the storage luminophore having a sensitivity that changes dependent on an accumulated x-ray dose to which the storage luminophore is exposed. The Examiner also apparently equated the correction of geometric distortion that takes place in the Mitchel et al reference with the correction of the data set pixels in claim 5. The Examiner also noted that in the Mitchell et al reference, enough x-rays are used so as to optimize the signal-to-noise ratio in the image with regard to patient dose and exposure time.

Applicant does not disagree that the aforementioned items are present in the Mitchel et al disclosure, but Applicant does not agree that those items are relevant to the subject matter of claim 5. The subject matter of claim 5 is concerned with the fact that, when a reusable storage plate is used to generate an x-ray image, the previous exposures (i.e., previous to the current exposure) to which the storage plate has been subjected will have an effect on the sensitivity of the luminophore layer in the storage plate. This is explained in the introductory portion of the present specification, at pages 1 and 2. The Mitchel et al reference is not concerned at all with this changing sensitivity of the storage luminophore, and therefore the Mitchel et

al reference does not disclose any corrective measures for solving that problem. The Mitchel et al reference, therefore, does not place the claimed invention “in the hands of the public,” which has been stated in many court decisions to be a necessary requisite for substantiating an anticipation rejection.

The geometric distortion that the Examiner noted in the Mitchel et al reference has nothing to do with luminophore sensitivity, and the fact that the signal-to-noise ratio can be adjusted in the Mitchel et al reference, as in many thousands of other references concerning image generation, also has nothing to do with the sensitivity of the luminophore. It is true that a luminophore with decreased or degraded sensitivity will, for a given level of input radiation, produce a reduced optical output (but not necessarily more or less noise), and the subject matter disclosed and claimed in the claims in the present application is concerned with this problem. This problem cannot be solved simply by increasing the strength of the incoming radiation (i.e., increasing the radiation dose), because this has adverse consequences to the examination subject. In the subject matter disclosed and claimed in the present application, therefore, a pixel-by-pixel correction is undertaken.

Even for the corrections that are disclosed in the Mitchel et al reference, there is no clear teaching that such corrections are made on a pixel basis, by generating a correction value for each pixel, as set forth in the original language of claim 1.

Claim 1 has been amended consistent with the above discussion to make clear that the sensitivity change is dependent on the accumulated radiation dose to which the storage luminophore has been exposed, not only in the current x-ray exposure but also in x-ray exposures, using the same storage plate, that preceded

the current exposure. The last step of claim 1 has been amended in the same manner.

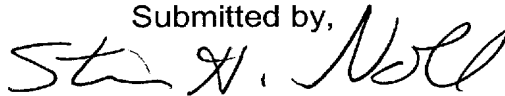
These changes are supported in the present specification in the discussion of the subject matter relating to allowable claims 6-8, and therefore are also submitted to be consistent, although stated in a more generic manner, with the reasons for allowance of claims 6-8. In claim 6, for example, the index m indicates that a signal is being evaluated that represents a pixel of the m -th x-ray image data set, and this is also explained at page 5, lines 27-29 of the substitute specification.

Applicant therefore respectfully submits that the Mitchel et al reference does not disclose all of the steps of claim 5 as arranged and operating in that claim, and therefore does not anticipate claim 5.

All claims of the application are therefore submitted to be in condition for allowance, and early reconsideration of the application is respectfully requested.

The Commissioner is hereby authorized to charge any additional fees which may be required, or to credit any overpayment to account No. 501519.

Submitted by,



(Reg. 28,982)

SCHIFF, HARDIN LLP
CUSTOMER NO. 26574

Patent Department
6600 Sears Tower
233 South Wacker Drive
Chicago, Illinois 60606
Telephone: 312/258-5790
Attorneys for Applicants.